

CLAIMS

1. Method for reducing the microbial contamination of surfaces and of food stuffs, comprising treating the surface
5 with one or more of the following:

- a) a solution of lactoferrin of acid pH;
- b) a solution of lactoferrin and a metal chelating agent, in particular EDTA;
- c) a solution of lactoferrin and a metal chelating
10 agent, in particular EDTA, of acid pH.

2. Method as claimed in claim 1, wherein the pH of the solution is increased to a value above the initial pH of the solution as defined in claim 1a), 1b) or 1c), in particular to a pH between 2 and 8.5, preferably a pH between
15 5 and 8, more preferably between 6 and 7, before treatment of the surface.

3. Method as claimed in any one of the claims 1 and 2, wherein the solution further comprises one or more polysaccharides, preferably polysaccharides negatively
20 charged at about neutral pH.

4. Method as claimed in claim 3, wherein the polysaccharide is selected from the group consisting of pectin, carrageenan, heparin, agar-agar.

5. Method as claimed in any one of the claims 1-4,
25 wherein the acid pH is a pH below 5, preferably below 4, more preferably below 3, even more preferably below 2.5, most preferably about 2.

6. Method as claimed in any one of the claims 1-5, wherein the concentration of EDTA in the solution is more
30 than 0.1 mM, preferably more than 0.2 mM, preferably at least 0.4 mM, more preferably at least 0.6 mM, even more preferably at least 0.8 mM and most preferably at least 1 mM.

7. Method as claimed in any one of the claims 1-6, wherein the amount of lactoferrin in the solution is 0.2 to 20% (w/v), preferably 0.5 to 12% (w/v), more preferably 1 to 8% (w/v), even more preferably 2 to 6% (w/v), most preferably about 2% (w/v).

8. Method as claimed in any one of the claims 1-7, wherein the lactoferrin is bovine lactoferrin, or (recombinant) human lactoferrin that shows 95 to 100% amino acid homology with native bovine or (recombinant) human lactoferrin.

9. Method as claimed in any one of the claims 3-8, wherein the amount of the polysaccharide is 0.001 to 0.2% (w/v), preferably 0.01 to 0.1% (w/v), most preferably about 0.02% (w/v).

10. Method as claimed in any one of the claims 1-9, wherein the surface to be treated is a surface in the oral cavity, wounded skin, or an inert surface, like in surgical instruments (surgical cutting blades, clamps, scissors, tubes etc.).

11. Method as claimed in any one of the claims 1-9, wherein the food surface to be treated is meat.

12. Composition for reducing the microbial contamination of surfaces or of food stuffs, comprising lactoferrin and optionally a metal chelating agent, in particular EDTA, and has an acid pH.

13. Composition as claimed in claim 12, further comprising one or more polysaccharides, preferably polysaccharides negatively charged at about neutral pH.

14. Composition as claimed in claim 13, wherein the polysaccharide is selected from the group consisting of pectin, carrageenan, heparin, agar-agar.

15. Composition as claimed in any one of the claims 12-14, wherein the composition contains no EDTA and has a pH

below 3, preferably below 2.5, more preferably below 2.3, even more preferably below 2.1 and is most preferably about 2.

16. Composition as claimed in any one of the claims 5 12-15, wherein the composition contains EDTA and has a pH below 5, preferably below 4, more preferably below 3, even more preferably below 2.5 and is most preferably about 2.

17. Composition as claimed in any one of the claims 12-14 and 16, wherein the concentration of EDTA in the 10 solution is 0.1 to 10 mM, preferably 0.5 to 5 mM, most preferably about 1 mM.

18. Composition as claimed in claim 17, which in the case of its use in or on food stuffs has a concentration of EDTA in the solution of more than 0.1 mM, preferably more 15 than 0.2 mM, preferably at least 0.4 mM, more preferably at least 0.6 mM, even more preferably at least 0.8 mM and most preferably at least 1 mM.

19. Composition as claimed in any one of the claims 12-18, wherein the amount of lactoferrin in the composition 20 is 0.2 to 20% (w/v), preferably 0.5 to 12% (w/v), more preferably 1 to 8% (w/v), even more preferably 2 to 6% (w/v), most preferably about 2% (w/v).

20. Composition as claimed in any one of the claims 12-19, wherein the lactoferrin is bovine lactoferrin, or 25 (recombinant) human lactoferrin that shows 95 to 100% amino acid homology with native bovine or (recombinant) human lactoferrin.

21. Composition as claimed in any one of the claims 12-20, wherein the amount of polysaccharide is 0.001 to 0.2% 30 (w/v), preferably 0.01 to 0.1% (w/v), most preferably about 0.02% (w/v).

22. Composition as claimed in any one of the claims 12-21, which composition is in the form of a fluid, or a dry product, such as a powder.

23. Composition as claimed in claim 22, wherein the
5 dry product is a dry blend or a dried solution.

24. Composition as claimed in any one of the claims 12-18 and 20-23 for use in wound care.

25. Composition as claimed in any one of the claims 12-18 and 20-23 for use in oral care.

10 26. Composition as claimed in any one of the claims 12-18 and 20-23 for use in decontamination of inert surfaces, such as surgical instruments (surgical cutting blades, clamps, scissors, tubes etc.).

27. Composition as claimed in any one of the claims
15 12-23 for use in the decontamination of food products, in particular meat.